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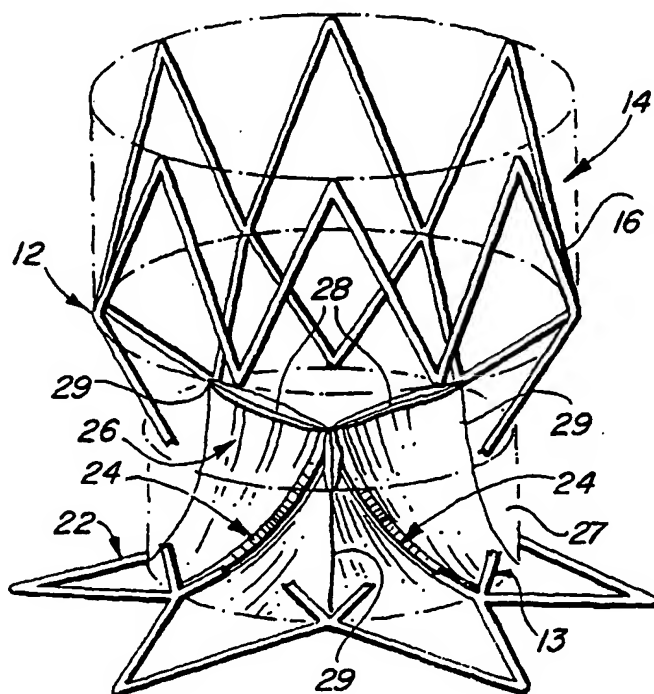
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- (22) International Filing Date:
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09/477,120 31 December 1999 (31.12.1999) US (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
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- Published:
— with international search report
- (88) Date of publication of the international search report:
24 January 2002

[Continued on next page]

(54) Title: **ENDOLUMINAL CARDIAC AND VENOUS VALVE PROSTHESES AND METHODS OF MANUFACTURE AND DELIVERY THEREOF**



(57) Abstract: This invention relates to prosthetic cardiac and venous valves and a single catheter device and minimally invasive techniques for percutaneous and transluminal valvuloplasty and prosthetic valve implantation.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

1. National Application No

PCT/US 00/34591

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61F2/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61F A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 957 949 A (GREENAN TREVOR ET AL) 28 September 1999 (1999-09-28) column 5, line 41 -column 6, line 22; figures	1,7-9, 26-28
A	US 5 997 573 A (QUIJANO RODOLFO C ET AL) 7 December 1999 (1999-12-07) abstract; figures	1,8,26, 27
A	US 5 855 601 A (CHUTER TIMOTHY A M ET AL) 5 January 1999 (1999-01-05) abstract; figures	1,26
A	EP 0 808 614 A (SAMSUNG ELECTRONICS CO LTD) 26 November 1997 (1997-11-26) abstract; figures	1,26
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

19 April 2001

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/34591

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 855 597 A (JAYARAMAN SWAMINATHAN) 5 January 1999 (1999-01-05) abstract; figures ---	1,26
A	EP 0 850 607 A (CORDIS CORP) 1 July 1998 (1998-07-01) abstract; figures -----	1,26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/34591

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 36
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see-additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-25,26-33

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-25,26-33

A valvular prosthesis comprising a stent body, a graft member covering the stent body, a biasing member projecting into the annular opening of the stent member and a valve flap member coupled to the biasing arm

2. Claims: 34,35

A catheter comprising an inflatable balloon, a sheath, a guidewire shaft and an annular plug member coupled to the guidewire shaft

3. Claims: 37,38

A septal prosthesis comprising a stent body having spaced struts and proximal and distal anchor sections, and a graft member covering the stent body

INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No

PCT/US 00/34591

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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